

REMARKS

This Amendment is submitted in reply to the Third Office Action dated January 28, 2004. Applicants respectfully request reconsideration and further examination of the patent application under 37 C.F.R. § 1.111.

Upon entry of the foregoing Amendment, Claims 1, 5-9, 37 and 41-42 are pending in the application. The amendments are believed to introduce no new matter, and their entry is respectfully requested. Based on the above amendment and the following remarks, Applicants respectfully request that the Examiner reconsider and withdraw all outstanding rejections.

Summary of the Examiner's Rejections

Claims 1, 5, 6 and 9 were rejected under 35 U.S.C. 102(b) as being anticipated by Norton (EP 0408280).

Claims 5, 6 and 8 were rejected under 35 U.S.C. 103(a) as being unpatentable over Norton (EP 0408280) in view of Cassin (US 5,910,287) and/or Knebel (US 6,503,456) and/or Turner (US 6,340,589) and/or Santarsiero (US 6,296,673).

Claim 7 was rejected under 35 U.S.C. 103(a) as being unpatentable over Norton (EP 0408280) in view of McPherson (US 5,096,676) or Warner (US 5,604,130).

Claims 1, 5-7 and 9 were rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted Prior Art (FIGS. 2A-2C) in view of McPherson (US 5,096,676) or Moulton (US 6,063,282).

Claims 37, 41 and 42 were rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted Prior Art (FIGS. 2A-2C) in view of McPherson (US 5,096,676) or Moulton (US 6,063,282) and in further view of Cassin (US 5,910,287) and/or Knebel (US 6,503,456) and/or Turner (US 6,340,589) and/or Santarsiero (US 6,296,673).

Claims 37, 41 and 42 were rejected under 35 U.S.C. 103(a) as being unpatentable over Norton (EP 0408280) in view of Cassin (US 5,910,287) and/or Knebel (US 6,503,456) and/or Turner (US 6,340,589) and/or Santarsiero (US 6,296,673).

Claims 37, 41 and 42 were rejected under 35 U.S.C. 103(a) as being unpatentable over Norton (EP 0408280) in view of Cassin (US 5,910,287) and/or Knebel (US 6,503,456) and/or Turner (US 6,340,589) and/or Santarsiero (US 6,296,673) and in further view of Hol (WO 00/00678).

Claims 1, 5-7 and 9 were rejected under 35 U.S.C. 103(a) as being unpatentable over Hol (WO 00/00678) in view of McPherson (US 5,096,676).

Claims 5, 6, 8, 37, 41 and 42 were rejected under 35 U.S.C. 103(a) as being unpatentable over Hol (WO 00/00678) in view of McPherson (US 5,096,676) in view of Cassin (US 5,910,287) and/or Knebel (US 6,503,456) and/or Turner (US 6,340,589) and/or Santarsiero (US 6,296,673).

Summary of Amendment

Applicants have amended Claims 1 and 37 to more particularly define the present invention.

Remarks regarding § 102(b) and 103(a) rejections

Applicants respectfully submit that amended independent Claims 1 and 37 are patentable over Norton, McPherson, Moulton, Applicant's admitted Prior Art (FIGS. 2A-2C), Warner, Hol, Turner, Cassin, Knebel and/or Santarsiero. The claimed invention as recited in amended independent Claim 1 (for example) follows:

1. A microplate, comprising:

a frame including a plurality of wells formed therein, each well including:

a first well having a relatively small reservoir with a substantially concaved bottom; and

a second well having a relatively large reservoir, wherein said first well is not entirely located within said second well nor is said first well entirely located outside of said second well nor is said first well entirely located around a perimeter of said second well but instead said first well and in particular the small reservoir has a portion that overlaps a portion of the large reservoir of said second well (emphasis on the distinguishing limitations).

Amended independent Claim 37 contains the same distinguishing limitations which are recited in pending independent Claim 1.

The teachings of Norton, McPherson, Moulton, Applicant's admitted Prior Art (FIGS. 2A-2C), Warner, Hol, Turner, Cassin, Knebel and/or Santarsiero differ significantly from the present invention as recited in Claims 1 and 37. The amended independent Claims 1 and 37 each recite a limitation where a well has a small first well and a large second well and wherein the first well is not entirely located within the second well nor is the first well entirely located outside of the second well nor is said first well entirely located around a perimeter of said second well but instead said first well and in particular the small reservoir has a portion that overlaps a portion of the large reservoir of said second well (see, FIGS. 3A-3B in the patent application). The cited prior art does not disclose, teach or suggest this particular configuration of a well as

recited in pending independent Claims 1 and 37. In fact, the cited prior art effectively teaches away from the particular configuration of a well recited in pending independent Claims 1 and 37. In particular, the cited prior art including McPherson (FIG. 3) and Santarsiero (see FIG. 3D) teach where each well has a small first well that is entirely located within a large second well. Or, the cited prior art including Hol (see FIG. 1 in corresponding US 6,039,804), Norton (see FIGS. 2A-2B), Applicant's admitted Prior Art teach where each well has a small first well that is entirely located outside of a large second well. Turner, Cassin, Warner, Moulton and Knebel teach microplates (or a filtration apparatus) that have a plurality of wells but none of which include a small well and a large well. As such, none of the cited prior art teaches a microplate where each well includes a small first well with a small reservoir which has a portion that overlaps a portion of a large reservoir of the large second well as claimed in pending independent Claims 1 and 37.

In the Third Office Action, the Examiner cited Norton, Applicant's admitted Prior Art and Hol to set forth three different interpretations of the meaning "overlap" with respect to a well including a small well and a large well to reject the previously submitted independent Claims 1 and 37. As described below, none of these interpretations correspond with or teach the particular configuration of a well as recited in the pending independent Claims 1 and 37. In particular, none of these interpretations correspond with or teach a well as claimed in the present invention that includes a small first well with a small reservoir which has a portion that overlaps a portion of a large reservoir of the large second well (see, FIGS. 3A-3B in the patent application).

First, the Examiner cited Norton and referred to FIGS. 2A and 2B to define "overlap" as the following "[t]he first wells are not entirely located within the second well nor are the first wells entirely located outside of the second well but instead the first wells have a portion of which that overlaps the second well (see page 2, lines 10-15 in Office Action)." It appears that this definition of "overlap" is satisfied when a well has a small first well with a reservoir that is entirely located outside and around a perimeter of a reservoir of a large second well. This is not the configuration of the well recited in pending independent Claims 1 and 37 where the claimed well includes a small first well with a small reservoir that has a portion that overlaps a portion of a large reservoir of the large second well (see, FIGS. 3A and 3B in pending application). As can be readily seen, the configuration of the well disclosed in Norton is nothing like the configuration of the well recited in pending independent Claims 1 and 37.

Second, the Examiner cited Applicant's admitted Prior Art and referred to FIGS. 2A-2C and sections [0008] and [0009] to define "overlap" as the following "[t]he first and second wells share a wall of lesser height than the other walls of the second well, such that the space formed by the shortened wall is the region in which the first and second wells overlap (see page 7, lines 3-8 in Office Action)." It appears that this definition of "overlap" is satisfied when a well has a small first well with a reservoir that is located away from

a reservoir of a large second well. This is not the configuration of the well recited in pending independent Claims 1 and 37 where the claimed well includes a small first well with a small reservoir that has a portion that overlaps a portion of a large reservoir of the large second well (see, FIGS. 3A and 3B in pending application). As can be readily seen, the configuration of the well in Applicant's admitted Prior Art is nothing like the configuration of the well recited in pending independent Claims 1 and 37.

Third, the Examiner cited Hol and referred to FIGS. 1 and 2 and page 19, lines 1-8 to define "overlap" as the following "[t]he first and second wells share a wall of lesser height than the other walls of the second well, such that the space formed by the shortened wall, which is labeled as the diffusion channel, is the region in which the first and second wells overlap (see page 17, lines 1-6 in Office Action)" It appears that this definition of "overlap" is satisfied when a well has a small first well with a reservoir that is separated from a reservoir of a large second well by a diffusion channel. This is not the configuration of the well recited in pending independent Claims 1 and 37 where the claimed well includes a small first well with a small reservoir that has a portion that overlaps a portion of a large reservoir of the large second well (see, e.g., FIGS. 3A and 3B in pending application). As can be readily seen, the configuration of the well in Hol is nothing like the configuration of the well recited in pending independent Claims 1 and 37.

As such, the three different definitions of "overlap" offered by the Examiner in view of Norton, Applicant's admitted Prior Art and Hol do not correspond with the particular configuration of a well including a small well and a large well as recited in the pending independent Claims 1 and 37. Accordingly, Applicants respectfully submit that the aforementioned substantial differences between Norton, McPherson, Moulton, Applicant's admitted Prior Art (FIGS. 2A-2C), Warner, Hol, Turner, Cassin, Knebel and/or Santarsiero and the amended independent Claims 1 and 37 are indicative of the patentability of the present invention.

Again, it should be noted that the Greiner microplate which the Examiner stated was Applicant's admitted Prior Art (FIGS. 2A-2C) is not "admitted" Prior Art. The Applicants specifically indicated in the patent application that the Greiner microplate shown in FIGS. 2A-2C was "possible prior art" (see, page 3, lines 15-16). The inventors of the present invention are not sure when the Greiner microplate was first developed in relation to the development of the present invention. Therefore, it would not be proper to classify the Greiner plate shown in FIGS. 2A-2C as "admitted" prior art. As such, it is not proper to use the Greiner microplate to reject the claims of the present application.

Conclusion

Applicants respectfully submit that all of the stated grounds of rejections have been properly traversed, accommodated, or rendered moot. Accordingly, Applicants respectfully request reconsideration of all outstanding rejections and allowance of pending Claims 1, 5-9, 37 and 41-42.

If the Examiner believes, for any reasons, that personal communication will expedite prosecution of this application the Examiner is invited to telephone the undersigned at the number provided.

It is believed that a fee is not required for this paper. If this is incorrect, the Commissioner is authorized to charge any fees which may be required for this paper to Deposit Account No. 50-1481.

Respectfully submitted,



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